

PHYSICS - COURSE DESCRIPTION

John Macuk, rm. 416

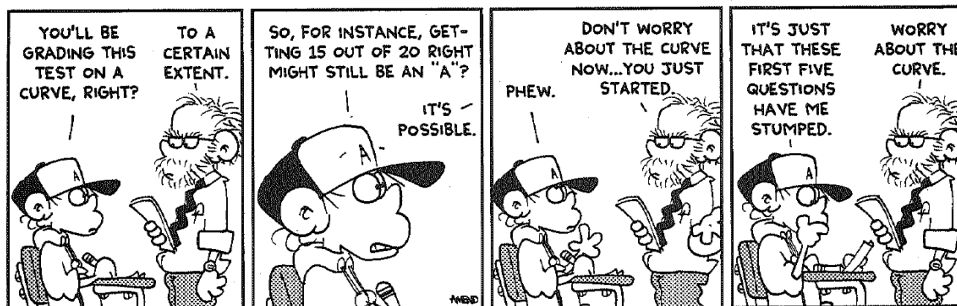
<http://macuk-arlington.wikispaces.com>

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What Physics is about

Science is a process of inquiry and experimentation. This class covers concepts in Physics and requires basic algebra, geometry and trigonometry skills. We will be using Hewitt's Conceptual Physics; I also recommend The Cartoon Guide to Physics, by Larry Gonick, for a fun way to learn the concepts and gain understanding.

First semester	Second semester
• Measurement , Unit Conversion & Graphing	• Momentum & Conservation
• Linear Motion	• Energy & Conservation
• 2D and Projectile Motion	• Waves and Optics
• Forces & Newton's laws	• Electricity & Magnetism



I expect my students to know and understand the **Arlington HS Mission and Expectations** and the **Student Handbook**, which you will find on the school website; below is a summary of how they will be applied in our class:

Social and Civic Expectations

Personal Responsibility

- ✓ Students will be punctual and prepared for class.
- ✓ Students will bring a note for each absence and make up any work missed.

Social Responsibility

- ✓ Students will work safely in a variety of classroom settings.
- ✓ Students will practice respectful behavior in a variety of classroom settings.

Critical Thinking

- ✓ Students will read and analyze their textbook, assignments and assessments.
- ✓ Students will complete all assignments at an acceptable level and on time.

Communication

- ✓ Students will record homework in a planner and maintain a well-organized science notebook.
- ✓ Students will promptly return any material requiring a parent signature.

Academic Expectations

Grading Scale:

- ✓ As described in the Student Handbook, but please note that I **do not treat D's as an acceptable grade!** If you have a less than passing grade (C-) on any work, I may expect you to redo the assignment to earn a passing grade!

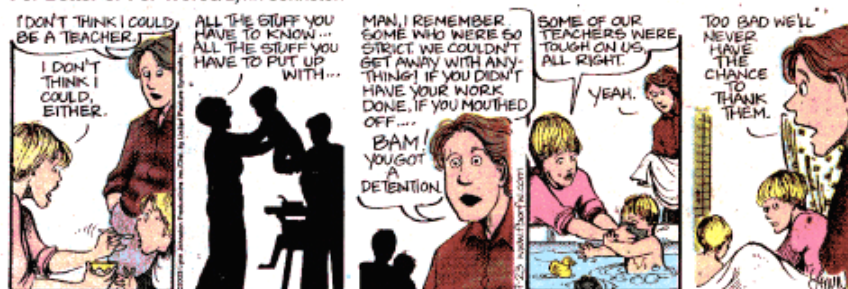
Grading Categories:

- ✓ Classwork & Labwork 50%
- ✓ Homework 10%
- ✓ Quizzes 20%
- ✓ Tests 20%
- 100%

Student Materials

- ✓ one Neatbook or composition book
- ✓ one graph ruled composition book
- ✓ one 1.5" binder with five (5) dividers
- ✓ Pens and Pencils
- ✓ Scientific Calculator (not graphing)

For Better or For Worse/Lynn Johnston



Classwork and Homework: You can expect to have homework once or twice a week. I expect my students to do the assigned homework and come prepared to class with their materials and homework. *See me or email me if you need help or are having difficulties! That's what I'm here for!*

For both classwork and homework, I encourage my students to learn collaboratively, but each student must hand in original work of their own. See the **Student Handbook** for the school's Academic Integrity Policy, definitions of Academic Dishonesty and Plagiarism. *Tutoring others is encouraged – giving answers is not!*

In my classes, I try to encourage the same kind work that my students will do when they leave school and have their first jobs: rather than relying on tests for grades, I check my student's classwork constantly and give regular feedback on how they are doing. *Doing the work in small pieces regularly is much easier than the night before a test or quiz!*

Class will begin each day with Warm-up (pop-quiz) questions on the board and any assignments due being collected. The day's agenda and assignments will be posted. Most classes will end with an Exit (pop quiz) question. *Expect a comprehensive quiz at the end of the week – be prepared!*



What you can do to help your child:

Ask what she did in school today: if she says “nothing” or can’t show you her notes and assignments, prompt her to produce them!

We will be doing something fun and exciting and learning new things every day! (...OK, practically every day...)

Attendance is a crucial element of success at Arlington HS. In this class, performance is the largest part of the grade; if your child misses class, it is her responsibility to find out what she missed and make up classwork and homework.

*(NB Assignments missed due to **unexcused absences** or **suspensions** may not get any credit!)*

Homework is exercise for your brain that strengthens your mental muscles; the most important thing you can do for your child is to provide a quiet space to study and to check that homework is being done. If your child says there is no homework assignment, ask to see her assignment planner.

The best way to improve your grade is to do all assignments on time, and re-do poor ones!

Communicate with me if you are concerned about your child's homework, or want to know how she is doing in class.

Visit my Wiki page <http://macuk-arlington.wikispaces.com> and e-mail me at jmacuk@arlington.k12.ma.us.

I look forward to a great year with you!

Mr. Macuk



Parent HOMEWORK

Student name _____ Class _____

Parent name & signature _____

Send me (jmacuk@arlington.k12.ma.us) an email that says something like “Hi, this is (your name), parent of (child’s name) from Physics that meets (your block) block; my phone number is (your preferred contact no.).” Add any questions or concerns you want to ask me about.

HOMework RUBRIC

FOR A 'C'

- ✓ Assignment must have students name, date assignment was due and the assignment details (pg and question numbers) at the top of the front page.
- ✓ Assignment is neatly written out.
- ✓ Assignment has the question before each answer.
- ✓ Assignment has answers to all questions.
- ✓ Some answers are correct.

FOR A 'B'

- ✓ Same as for a **C**, and most answers are correct.

FOR AN 'A'

- ✓ Same as for a **C**, and practically all answers are correct.

LABWORK RUBRIC

FOR A 'C', lab report is:

- ✓ Typed.
- ✓ Title page with names & responsibilities, and score sheet.
- ✓ Neat & presentable.
- ✓ Correctly organized.
- ✓ Graphs & tables ruled.

And has:

- ✓ Introduction
- ✓ Materials and methods
- ✓ Summary of procedure
- ✓ Results
- ✓ Complete graphs
- ✓ Conclusion

FOR A 'B'

Same as for a **C** and:

- ✓ Introduction has Purpose, Question and Hypothesis.
- ✓ Results are in complete tables/multiple trials.
- ✓ Most questions answered.
- ✓ Conclusion relates results to purpose and further questions asked

FOR AN 'A'

Same as for a **B** and:

- ✓ Introduction has a clear and well written Purpose, Question and Hypothesis.
- ✓ Results are in complete tables with multiple trials and units/labels on figures
- ✓ Graphs have titles and legends and graphs are printed.
- ✓ All questions answered.
- ✓ Conclusion relates results to purpose, supports/refutes hypothesis, discusses where errors occur, establishes logical relationships and further questions asked.